



Staff Report

RESOLUTION APPROVING THE TECHNOLOGY MASTER PLAN DEVELOPED BY SOFTRESOURCES AND AUTHORIZATION FOR CITY MANAGER TO NEGOTIATE A PROFESSIONAL SERVICES AGREEMENT WITH ESKEL PORTER AND A PURCHASE ORDER NOT TO EXCEED \$362,000 FOR MICROSOFT AND HANSEN SOFTWARE.

Honorable Mayor and Council Members:

Summary

Staff has completed contract negotiations for the City's new financial software system with the selected vendor, and obtained best and final pricing for the software and its implementation.

Background

The current financial software system has been in place, with regular updates, for approximately 15 years. While this system has performed well, it is deficient in many areas, unable to provide all the functions the City requires for its day-to-day operations, and has not kept pace with new technologies, for example, it lacks the ability to allow citizen access to City data over the Internet.

The City retained the software selection consulting firm SoftResources LLC of Kirkland, Washington, after City Council approval at the June 26, 2007 meeting. Their direction was to assess current software practices and then identify a general strategy, framework, policies, programs, and activities necessary for technological improvement, including a detailed plan, budget, and timetable for implementing those programs. The areas most evident requiring a major overhaul to the plan include, but are not limited to:

- Existing financial enterprise legacy software (Cayenta) which was acquired over a decade ago, and while minimally functional, is woefully outdated
- Very limited network and Internet connectivity in an environment that increasingly is demanding external access to data via the Internet
- No operations work order, work management and street maintenance capability
- No Human Resources component

The first phase of the consultants' assessment was a recommendation to proceed with a selection project to replace the City's current financial software, addition of required software, and integration with identified existing City applications in order to meet the City's "E-vision," that is, to enable full City services to be available 24 hours of the day, seven days a week for Belmont citizens and council members.

Four key software criteria for the selection of a vendor were:

1. E-vision, enabling full City services to be available 24 hours of the day, seven days a week for Belmont citizens and council members.
2. Functionality to support Belmont's e-vision, that is, fully functional financials software that would support a "best-of-breed" approach so that City departments could select specialized software.
3. Technology that is forward-looking, able to present over the Internet, and able to support integration with best-of-breed applications currently in use.
4. A value-added reseller (or VAR), which is an implementer of software that has a view of the municipal software world that matches Belmont's, whose corporate culture is compatible, and which possesses similar values and uses a similar communication style as Belmont.

At the last report to council staff had completed software demonstrations, due diligence on the preferred software vendor including site visits to observe similar installations, and was entering contract negotiations.

Discussion

Actions status

Contract negotiations. Since the May report Staff has been working contract negotiations for the City's new financial and related software systems with the selected vendor, Eskel Porter. Together with Eskel Porter, Staff has refined plans, identified required modifications and enhancements, and obtained best and final pricing for the software and its implementation. The final contract including project phases, scope of services, and terms and conditions will be presented to the City Council at a subsequent meeting, anticipated within the next 30 days. Detailed project costs from Eskel Porter are outlined under Fiscal Impact. Negotiations with Eskel Porter are on-going for final pricing and terms.

Technology Master Plan update. SoftResources has completed a four-year Technology Master Plan to reflect the steps required to implement Belmont's e-vision. The Plan has been reviewed by Staff and is consistent with Eskel Porter's implementation methodology. The Plan is attached to this Report.

Next steps

Within the next 30 days, Staff will present the final negotiated contract, including all phases and scope of services. Once approved by the City Council, Staff will proceed with the implementation process as outlined below:

Implementation will be phased in close cooperation with Eskel Porter. Phase I and Phase II are scheduled to take place this fiscal year. Identified sections of Phase II will be spread out between FY09 and FY10. Phase III is scheduled for FY11 and Phase IV to complete the project is scheduled for FY12.

Phase I. The first phase, expected to begin as soon after Council approval as possible, will involve detailed planning and resource allocation. Resource allocation includes assigning City Staff to project teams which will be responsible for implementation tasks in their respective areas of expertise and which will provide direction for configuring and setting up the system. Focus in the initial phase will be on the implementation of Microsoft Dynamics GP Financial Management, Human Resources Management, and Payroll software. Implementation of Hansen Work Order Management, Asset Management, GIS and Customer Service software, will also take place. The cost for Phase I will be \$467,325 plus a \$15,000 contingency.

Phase II. Systems integration will be the focus of Phase II. Hansen and Dynamics GP will be done first, and then the focus will move to integration with existing Belmont systems: TRAKiT for permitting, ESRI with GIS and POSM, TM1 with Microsoft Dynamics GP, and Document Imaging. Phase II will begin at the completion of Phase I and will extend into FY10. The cost for Phase II will be \$287,105 plus a \$15,000 contingency.

Phase III. This will include Dynamics GP's HR Self Service Portal, Hansen Business Licensing, Online credit card transactions, Cashiering, and key integration with Belmont systems including TRAKiT Permitting and ActiveNet. Phase III will begin at the completion of Phase II. The cost for Phase III will be \$102,550 plus a \$15,000 contingency.

Phase IV. This will include custom integration with existing Belmont systems including TRAKiT Permitting, and Recreation ActiveNet. The development of the Website Interface for the E-vision component will be defined and created. The City's E-vision, which will enable full City services to be available 24 hours a day, Phase IV will begin at the completion of Phase III. The cost for Phase IV will be \$108,000.

Full implementation of all modules is anticipated by FY2012.

General Plan/Vision Statement

This project supports Belmont's vision "to plan, fund and utilize cost-effective technologies to provide improved information for decision making, personnel productivity, and public access to City information" (1999 Technology Master Plan, p. I-2).

Fiscal Impact

The following schedule summarizes the fiscal impact of adopting the 5 Year Technology Master Plan and implementing the first year of projects.

Funding Analysis		
Technology Master Plan Recap	FY 2009	\$1,158,736.61
	FY 2010 – FY 2013	654652.80
		<hr/> \$1,813,389.41
FY 2009 Phase I Implementation	FY 2009	\$1,158,736.61
Less Available Funding	FY 2008 Unencumbered	262,000.00
	FY 2009 Adopted	387,700.00
Amount to be Provided	FY 2009 Mid Year Review	<hr/> \$508,036.61

From the schedule above, there is an additional \$508,061.61 required to implement Phase I of the Technology Master Plan. As part of adoption of the Technology Master Plan, the Belmont City Council will also authorize a supplemental appropriation in this amount for inclusion in the FY2009 Mid-Year Review. There is sufficient funding in the Fleet and Equipment Management Fund for this purpose. Attached to the Technology Master Plan is a comprehensive costing of projects by fiscal year, including discounts and contingencies. Final pricing for services is subject to negotiation by the City Manager.

At this point, staff is requesting Council approve a purchase order in the amount not to exceed \$362,000 for the Microsoft Dynamics and Hansen Software. Approval of this purchase order prior to June 30, 2008 will assure the City receives discounts on these products.

Public Contact

Posting of City Council agenda.

Recommendation

Staff recommends that the Council adopt the attached resolution approving the Technology Master Plan, authorizing Professional Services Agreement negotiations and purchase order approval.

Alternatives

1. Approve the resolution approving the Technology Master Plan, authorizing Professional Services Agreement negotiations and purchase order approval.
2. Do not approve the resolution approving the Technology Master Plan, authorizing Professional Services Agreement negotiations and purchase order approval.
3. Refer back to staff for further information.
4. Take no action at this time.

Attachments

- A. Resolution approving Technology Master Plan, authorizing negotiation of Professional Services Agreement and approval of purchase order
- B. Technology Master Plan (Strategic Systems Plan)

Respectfully submitted,

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Jack R. Crist
City Manager

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RESOLUTION NO. _____

**RESOLUTION APPROVING THE TECHNOLOGY MASTER PLAN DEVELOPED BY
SOFTRESOURCES AND AUTHORIZATION FOR CITY MANAGER TO NEGOTIATE
A PROFESSIONAL SERVICES AGREEMENT WITH ESKEL PORTER AND A
PURCHASE ORDER NOT TO EXCEED \$362,000 FOR MICROSOFT AND HANSEN
SOFTWARE.**

WHEREAS, the City of Belmont requires a technology master plan to address long term needs of City departments and public information; and

WHEREAS, through an extensive review process, it was determined that SoftResources Consulting develop a Technology Master Plan, also known as a Strategic Systems Plan; and

WHEREAS, through a citywide assessment and demonstration by three software vendors, it was determined that Eskel Porter provide professional and implementation services; and

WHEREAS, it was determined after software needs analysis, that Microsoft and Hansen software meet the needs of the Strategic Systems Plan.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of Belmont:

1. Approve the Technology Master Plan
2. Authorize City Manager to negotiate a Professional Services Agreement with Eskel Porter
3. Approve a Purchase Order for Microsoft and Hansen software not to exceed \$362,000.

* * * * *

I hereby certify that the foregoing Resolution was duly and regularly passed and adopted by the City Council of the City of Belmont at a regular meeting thereof held on June 24, 2008 by the following vote:

AYES, COUNCILMEMBERS: _____

NOES, COUNCILMEMBERS: _____

ABSTAIN, COUNCILMEMBERS: _____

ABSENT, COUNCILMEMBERS: _____

CLERK of the City of Belmont

APPROVED:

MAYOR of the City of Belmont

STRATEGIC SYSTEMS PLAN

Introduction

This Strategic Systems Plan was commissioned by the City of Belmont as a high-level supplement to its Technology Master Plan of February 1999 in order to address issues that may arise during the new financials system implementation. The purpose of this Plan is to give a high level map of how primary applications should work together in order to give the city complete enterprise software functionality. As of this writing, some portions of this Plan have already been executed by the City. Readers are referred to the 1999 Plan for detailed background information. To the extent that the findings and recommendations of that plan remain valid they will not be revisited in this Plan except to emphasize their continuing importance.

Enterprise applications overview

Belmont has adopted a "best-of-breed" strategy to selecting software. This means Belmont acquires specialized standalone applications to augment and fill functionality gaps in its existing software. In the process, the Cayenta Financial Management System by Harris Computer Systems currently in use was found to be unable to keep pace with the technology and functional requirements needed to provide dynamic long term integrations with the best-of-breed applications. Recently Belmont performed a software selection to find a replacement for Cayenta and ancillary missing functionality. After an organized search and extensive evaluation process Belmont chose Microsoft Dynamics GP and Hansen Technologies as the two primary applications to complete its best-of-breed enterprise application vision.

Because this is a best-of-breed approach, all the various applications need to be able to communicate well with each other, and where there is duplication of functionality or data a master record needs to be identified along with data paths to provide information to other applications. While it is not possible to specifically identify all details of these interactions it is possible to give an overview of vision and a general plan of how these objectives are to be achieved.

This Strategic Systems Plan is divided into three sections. **Applications – Functional Footprint** identifies Belmont's best-of-breed application solutions along with their purpose and function. **Functional Integration** discusses Belmont's key functional areas in light of what functions will be handled by which applications and what high level integrations will be required. **Technology, Training and Staffing** provides an extension to the 1999 Plan with regard to facilities, hardware, software tools, training, database and staffing.

Applications – Functional footprint

Microsoft Dynamics GP. Belmont has chosen Microsoft Dynamics GP (GP) to completely replace Cayenta as Belmont's financial software system. As such it will be Belmont's software backbone that every city function and service will touch. It uses the familiar Windows user interface and runs on the Microsoft SQL Server database using the Microsoft Windows Server operating system. GP provides solid integration with Microsoft Office applications. It will also allow good Web access for citizens and staff. As it is a Microsoft product with thousands of installations, Belmont should experience better upgrade support in comparison with the current financial software vendor.

The Finance department will use the general ledger on a daily basis, as will Accounts Payable and Accounts Receivable. All departments will use the purchasing functions and associated "workflow," that is, automatic routing of documents to the users responsible for approving or working on them. Citywide, cash receipts will be managed in GP even though the actual cashiering will be done in Hansen. Significantly improved functionality will include grant management, project accounting,

standard fixed assets and maintenance management. New functionality included in GP will be timekeeping and human resources.

Hansen Technologies. Hansen will supplement GP functionality to provide cashiering, infrastructure assets, maintenance, work order management, and a Web portal. Hansen uses the same database platform as GP which simplifies integrations because it uses the same tools. Hansen can handle workflows for non-purchasing processes.

Belmont Public Works staff will use Hansen Asset Management to manage and track infrastructure assets such as roads, sewer and storm water. Maintenance staff will use Hansen Asset Management to manage and track building and parks maintenance.

Belmont's single overarching objective is its desire to provide a "virtual city hall" with the ability to conduct business 24 hours a day, seven days a week. Hansen Dynamic Portal will provide Belmont's Web front end, the portal into city business. It will be accessed via a hyperlink on Belmont's current Web page. The new page will be configured to look exactly like the city's main page, and will contain hyperlinks to such processes as permits, licenses, complaints, service requests, or anything else Belmont decides to open to the public.

Hansen Dynamic Portal for Customer Services (citizen request management, or CRM) will be implemented. Staff will use CRM to take, track, assign, respond to and report on citizen requests. This application will need to integrate its database with other repositories of names and addresses such as CRW. Belmont will need to work closely with the implementer to make sure data is stored in the appropriate repository.

TRAKiT by CRW Systems. TRAKiT by CRW Systems (CRW) will continue to be used by Community Development for licensing, permitting and planning. Currently installed modules include ProjectTRAK, PermitTRAK, CodeTRAK and LandTRAK. Bi-directional integration between Hansen and CRW is possible to achieve.

ActiveNet. ActiveNet will continue to be used by Parks and Recreation for scheduling classes, reserving facilities and receiving online and credit card payments.

Questys. Questys will continue to be used by the City Clerk to manage "living documents" such as Council agendas and minutes, both current and past. Archiving Belmont's legislative history, Council actions and resolutions, executive proclamations and other documents will continue to be an ongoing process. Questys can be used to expand city services to indexing legislative actions as well as establishing a searchable electronic archive of historical documents. Workflow functionality in Hansen might be able to be used to automate some portions of these activities.

ESRI. ESRI's geographic information system (GIS) will be expanded to Public Works and Maintenance, as well as the new master name index (MNI). With Hansen's integration tools, the potential exists to open parts of Belmont's GIS database to the public.

TM1. TM1 will continue to be used for budgeting and reporting. Belmont should explore the possibility of using its Web component as a means to provide drilldown capability to citizens and city officials.

Functional Integration

Belmont's best-of-breed approach provides each department with application functionality specific to its functional needs. The drawback is that multiple applications have to interact with each other in order to provide all the data necessary for each department. This section presents a high level outline of integrations among the applications that comprise Belmont's enterprise solution from a functional perspective.

General Ledger. The master general ledger transactional and historical record will be maintained in GP. Additional general ledgers for different entities will also be maintained in GP. Any record requiring a general ledger entry will be input either by automatic interface, by electronic upload from a spreadsheet or database, or by a manual entry into the GP general ledger. To the extent that data is available the general ledger will be the master file for all financial historical reporting.

Procurement. Procurement, or the “purchase-to-pay” cycle, keeps as many purchase transactions as possible in GP where the GP workflow engine can manage purchasing rules and full visibility of all liabilities is available. Since GP will manage the master accounts payable file, it will be the only application to issue payments. It is not the intent to have all costs transferred back to department applications, therefore only those cost accumulations that need to be transferred will be done via a two-way integration. This means that some departments will have to look in two different applications to find all the information they need, for example, Community Development will use CRW operationally to investigate specific permits, but turn to GP for department financial reporting.

Belmont will need to review existing purchasing processes and make changes both to accommodate and to take advantage of the new applications and the tools they provide. The workflow sketches below comprise a starting point for the purposes of developing a high level integration plan.

For any purchase that requires a PO, or for any purchase that a department would like to track its purchase commitments against, the purchase process will start in GP with an electronic purchase requisition. Once an electronic requisition has been completed the GP workflow engine will determine who the approvers are. If the PO amount is over \$5000, for example, workflow will automatically route the requisition to the appropriate manager for approval. If the amount is between \$1000 and \$5000, workflow will route the requisition to the appropriate department managers, if below \$1000 other approvers will be routed the requisition. If there are multiple department accounts involved the requisition will be routed to each responsible department. Electronic documentation may be attached to and accompany the requisition, or paper attachments can be routed separately, as desired. The entire process will be managed by GP’s workflow engine. Because they will have access to all requisitions and purchases in GP, departments should have no necessity for maintaining duplicate side ledgers.

The approver will be responsible for making sure the proper account code is used and that any project or work order numbers are assigned so that, once approved, all information required for payment will be in the system when the invoice is received. While this departs from current processes, this method will allow the city and its departments to track purchase commitments by department, by project or work order, and budget status, thus relieving departments of the need for department or project subledgers or side systems.

An approved requisition will be automatically rolled over into a PO allowing the purchase to proceed. When the items are received or the services are accepted as complete, the record will be updated to indicate the new condition. When the invoice is received and entered into the system GP will link the requisitions, the approvals, the purchase order, the receipt acknowledgement and the invoice, and, if within preset payment tolerances, the invoice will be put in the payment queue.

Payments for work-in-process, such as large construction projects or consulting engagements, will be billed from the projects module in GP which allows for progress payments and tracking of costs-to-date.

Products and services purchased on account or by CAL-Card will be entered into the GP system when the billing statement is received. The city should explore a method to create visibility of liabilities from purchases made using this method and establish a record of approvals. All payments will be made from GP and will be queued and paid in balance with Belmont’s cash flow and obligation to pay.

Invoicing. General bills issued by departments other than bills for specific fees and services will be generated, tracked and collected in GP. Department billings such as permits, certificates and inspections generated by Community Development will be generated using CRW's service-for-fee calculation tables and printed formats. CRW will then pass the bill electronically to the Hansen cashiering system for payment. The customer will pay the bill at the cashier station or over the Web, either of which will electronically inform CRW that the bill has been paid. Community Development transaction records will be kept and managed in CRW for easy accessibility. Cash will be reconciled with CRW records daily and delivered to Accounting for deposit. The financial receipts for the day will be electronically entered into GP via integration.

Parks and Recreation primarily collects money through ActiveNet as citizens sign up for classes and activities. The end of day closing procedure will pass the collected receipts to Accounting for manual entry and have the electronic interface pass financial data from ActiveNet to GP.

Project-related billings where materials and labor costs are accumulated and then charged to a customer will be collected and billed from GP which will pay all bills and have the payroll costs and will therefore be the cost collection tool. Departments should be given access to the project accumulations for which they have responsibility in order to avoid duplication of effort in department spreadsheets. Project billing from GP will go to Accounts Receivable and the standard GP receipting processes will follow.

During implementation, Belmont will need to decide if Public Works work order costs and special Community Development costs should be electronically duplicated in their respective department applications. Duplication should be avoided as much as possible, but if duplication is found to be necessary registration of receivables and receipting of payments should always be done in GP.

Cashiering. The cashier station is set up to accommodate department for-fee bills. Two-way real time integrations between department applications generating the bills and the cashier station need to be established. The cashier station should also be able to accept and register Web payments.

Workflow. The city should implement workflow where possible and use it to assist in the management of business practices. Tools governing workflow are available in most of Belmont's best-of-breed applications. Each application workflow will route and drive processes as they relate to that application. GP workflow will handle financial requests such as purchasing approvals and budget notifications. Hansen will do related citizen complaint management and notification. CRW will do permitting-related workflow. It will be determined at the time of implementation if there is some need to route some workflows across applications and the best tool will be selected then.

Master Name Index. The MNI will hold the names of all people associated with the city including citizens, customers, vendors, employees, and council members. The MNI will keep user sign-ons and passwords for virtual city hall access where citizens can sign on to pay bills, get city information, schedule Parks and Recreation classes, read meeting minutes, file complaints, apply for permits, or whatever else Belmont makes available through its Web site. The applications accessed via the Web will control the appropriate security, so, depending on the sign-on, those accessing the services can only perform operations or see information they are permitted to see.

The MNI will need to have bidirectional integration with any other relevant name registries in the city's applications. The architecture of name sharing will have to be carefully thought out prior to implementation to ensure that the virtual city hall requirements can be achieved and to also make sure that updates of data are not overruled by other updates. The City will build and manage the master name index using Hansen Dynamic Portal for Customer Services.

Project accounting. GP will be used for project accounting. All time and purchases associated with a project or work order will be identified at the time of entry so costs and time can be accumulated to a project. Departments should be able to set up and manage projects and project budgets in GP. They

should be able to see accumulations of costs, and committed costs for labor, labor hours, materials and contracts in real time—against a budget if desired. If billing is required it should be done from GP.

If there is a business need to move accumulations from GP to a department application, a two-way integration should be set up to move the data; however, this should be avoided as a general practice.

Time Collection. Time card information will be collected in the GP time collection system. Staff will either write time directly to electronic time cards or fill out paper cards for one department member to enter on behalf of staff each pay period. Time cards should include time to accumulation accounts such as work orders and projects, as well as sick, vacation, and other established time categories. Salaried employee time does not need to be entered except to report time for the categories mentioned above. Salaried employees should have the ability to split time among departments and report work on projects and work orders so accurate accumulations of costs can be collected.

Once time is entered into GP there will be an approval process by department heads, city managers and Payroll, as determined to be appropriate. Approved time will flow into Payroll for payment. The city should address its current business process of projecting time for the last part of the work period to accommodate the last day of time collection coinciding with the pay date.

Payroll and Human Resources. Payroll and Human Resources will be set up in GP. Departments should not have to keep side ledgers containing payroll information. Labor costs and time card hours should reside in GP and that information should be accessible to departments for budgeting and project/work order cost tracking. The integrations between payroll and project/work order cost tracking already exist in GP.

Human Resources needs to share appropriate information with departments, establishing security around data that is inappropriate to share managed with the help of IT. Training, employment history, safety, address, and so forth, are usually made shareable. HR should give employees and departments as much access as possible and oversee any changes and entries that are made.

Fixed Assets. Standard fixed assets that have no need for ongoing maintenance records will be maintained in the GP fixed asset system. Infrastructure assets such as roads and pipelines, or maintained assets such as vehicles, will be maintained in the Hansen fixed asset system. Work orders and contracts that add to or extend the value of an asset can easily be released in Hansen to manage the work and attached to the asset to give a lifetime value. The city will decide whether to depreciate assets in Hansen and bring the depreciation values over to GP, or to export the asset values annually to GP and depreciate them there. Whatever business process is decided upon at implementation should be automated with integrations.

Maintenance. Hansen will be the application for all maintenance whether done on infrastructure assets or fixed assets. Departments other than Public Works that have maintenance responsibilities such as Parks and Recreation will use Hansen to track and maintain their properties. This will facilitate the accumulation of costs for a property and allow the maintenance group to set up and schedule preventive maintenance and assign work to work orders. Hansen should be set up to provide reporting for other departments that need their own segregated reports. Financial data essential for departmental control and reporting should also be set up to flow automatically to the appropriate department.

Implementation – Timing and phasing

Due diligence. This phase is a part of the vendor's ongoing sales cycle. The city continues the work to verify the vendor's ability to perform by conducting user visits and making user calls. It also continues to obtain information so it can verify that the chosen solutions can perform all the

functional requirements asked for. At the end of this phase the city should know what modules it should purchase and have a rough idea of what implementations will be required.

As is/to be. As used in this Plan, "as is/to be" is a general umbrella term encompassing procedures such as business process analysis, business process review, integration planning and gap analysis. As is/to be meetings should be conducted between the city and the software vendor to determine what business process systems currently are and what they should be in the future. This will also determine the implementation work requirements so that scheduling and phasing can be determined. Although Belmont will be required to provide some compensation to the vendor for this service, this phase can be done either before or after City Council approval. If done before Council approval the presentation can be more complete in terms of both scope and price, and the software replacement project can be more accurately assessed.

Contract negotiation. In this phase the City will negotiate final pricing with the vendor for both software and implementation. If done prior to the as is/to be meetings assumptions will need to be made and price and scope adjustments will be necessary after the business process analysis is complete.

City Council approval. For this phase the city will assemble the documentation created during the selection process, this Strategic Systems Plan, the documentation from the as is/to be meetings, and documentation from the contract negotiations. City staff will present to the City Council and obtain approvals to proceed with the project.

Plan implementation. The city, in cooperation with the implementation vendor, has created a detailed implementation plan which details each phase of the project. The details of the implementation plan were created based on the results of the as is/to be meetings when the specifics of the implementation were determined. The detailed implementation plan includes a roadmap to implement all the functionality the city is looking for with at least a high level overview of the types of integrations the city can expect in the final product.

Project Timeline and Costs. City Staff and Eskel Porter, the implementation vendor, have negotiated a professional services agreement (PSA) that includes a detailed project timeline complete with phasing and projected start and completion dates. The PSA will be the guiding authority for the implementation project. Project kickoff is expected to be on August 1, 2008, with completion projected to be in 2012. Briefly, the phases and respective costs are as follows:

Phase I – Core Systems	
Software	\$352,436.16
Implementation	\$467,325.00
Phase II – Business Licensing and Systems Integration	
Implementation	\$287,105.00
Phase III – Core E-Vision	
Implementation	\$102,550.00
Project Contingency Consulting Services	
Phases I, II, III	\$45,000.00
Phase IV – Non-Core E-Vision	
Requirements, Scoping, and Implementation	\$108,000.00 (estimated)

Technology, Training and Staffing

Facilities. To protect Belmont's software and hardware investment, proper facilities must be maintained. The hub room must be adequately ventilated to prevent service interruption caused by heat damage to routers, universal power supplies or other heat-generating hardware. Operating such hardware in a high-heat environment can lead to shortened life span and incur premature replacement costs. If the current hub room cannot be ventilated Belmont should consider moving the equipment to more suitable space.

Disaster recovery. The disaster recovery plan outline proposed in the 1999 Technology Master Plan is sound. It should be completed and implemented as soon as possible.

Hardware – Servers. Server requirements for the new software will be determined by the implementation vendor in consultation with the City. Data redundancy and replication, mirrored backup, level of backup, level of shared resources, multiple applications on the same server, network changes and related issues should all be addressed.

Peripheral hardware. Belmont now has, or plans to adopt in the near future, various pieces of peripheral hardware. The number and location of kiosks throughout the city must be determined. Bar code readers are desired for AR invoice processing, while other uses could include licenses and permits. New cash receipting software can probably use existing hardware, but Belmont must consult with the software vendor to make sure they are compatible. As an element of one of the later phases of the implementation, Public Works field workers could be assigned PDAs or laptops, as appropriate, for reporting and researching while in the field. To be determined is how data would be transmitted and which hardware is supported by the installed software.

Toolsets and support software. Support software includes Windows Exchange Server, Microsoft SharePoint Server, eConnect Web Services, Hansen Dynamic Portal. Belmont must gain enough expertise to work with and manage these tools so that it does not become dependent on software vendors for all support. Belmont must augment its ability to use and support its new technology through training and education.

Training. Belmont's IT group and implementation team will obtain training during the implementation process therefore will be the most knowledgeable about the system. As the go-live date approaches end users must be trained not only on how the system works, but also on new business processes that will be put in place. The City should anticipate the need for change management and prepare staff for implementation of best practices offered by the new software. After go-live, a plan to sustain ongoing training and education about processes and systems should be implemented to enable users to continue to maximize usability of the system.

Developing, funding and implementing a training plan for users and system administrators involves formal system training and ongoing training including refresher courses and training on new enhancements. Vendor supported education and training based on best practices is extremely beneficial at initial implementation. The training program should include ongoing training through formal training classes, vendor sponsored user groups, and informal training sessions that promote knowledge sharing and department collaboration. Belmont should also develop succession and contingency plans, particularly where there are security risks or risks to important data and reports. It is common for organizations to assess ongoing training costs for a period of 5–7 years beyond initial implementation.

As Belmont specified, GP has bidirectional integration with Microsoft Office. In order to gain full advantage of this capability, users must be skilled MS Office users. Community colleges and privately operated computer training schools offer courses covering a wide variety of applications at beginning to advanced levels. Online self-directed courses are available directly from Microsoft and other providers. Funding and time should be provided and staff should be encouraged to take applicable

courses, especially since the new software implementation will require upgrading to Office 2007 which uses different conventions and is more powerful than previous versions of Office.

Database. Belmont's preference for Microsoft SQL Server as its primary data repository should guide the selection process of new best-of-breed applications. Any new application should use the same database technology unless there is a compelling reason for using another. This should enable improved integration.

IT staffing. Belmont must determine if its current IT staffing level is sufficient. After implementation there should be one full-time person dedicated to maintaining the new software applications, including maintaining all integrations among all of the best-of-breed applications and the financial core, and helping to maintain workflows. This staff member will be responsible for training staff in the proper use of the new applications and for responding to staff requests for new forms and reports.

Systems upkeep and replacement

Having completed a selection process to replace the key components of its enterprise system Belmont will have its hands full getting the new applications to work together to provide the vision desired. However, some existing systems only partially live up to expectations and will require review in coming years.

Questys. Belmont's document management system seems well suited for managing active documents such as agendas and meeting minutes, but a full evaluation of the application as a long term document storage system integrated to other applications is incomplete. Currently Belmont believes it can do what is needed and that an adequate integration can be made with other applications. But if Questys does not meet expectations the city should consider solutions to augment any deficiencies. This evaluation should take place approximately two years after the core GP financial system goes live. Additionally, IT and users state that Questys' workflow programming is complex and arduous, and so far has been judged not to meet the city's needs. The full evaluation of Questys should question whether application workflow engines contained in Hansen would be able to compensate for this issue.

TM1. The current plan is to retain TM1 as an application Finance users are familiar with, but this may not be the best toolset for budgeting and reporting. Should TM1 prove inadequate term, Belmont should evaluate Microsoft Dynamics GP Forecaster. This should also be formally reevaluated two years after go-live, or sooner if significant issues arise.

ActiveNet. Other cities have had some issues integrating ActiveNet with best-of-breed financial systems. These issues have largely centered around the support ActiveNet is willing to give and the fact that most Parks and Recreation departments tend to operate in their own self-contained environment. Integration with ActiveNet should be evaluated after implementation of the core financial system. ActiveNet appears to be adequate for the Parks and Recreation department so it is not likely there will be value in replacing the application. However, the city should review how to mitigate any issues around integration or at least adjust business processes to achieve the desired results.

ESRI. When the as is/to be phase is complete Belmont should draw up a master plan for implementing GIS functionality where appropriate and then break down the implementation plan to coincide with the corresponding implementation of the modules it will touch. Where it is too aggressive or resources are limited to implement with the corresponding application the GIS integration should be phased later in the planning sequence. The strength of the ESRI GIS solution is that the key applications have standard integrations to it.

Replacement strategy. After implementation of core financials Belmont will have solid mainstream applications for its enterprise strategy. Even if some mergers and acquisitions take place in the software vendor market the city will have core vertical functionality for each of its department systems. Each will be modern enough and supported well enough that they should perform for at least 5–7 years provided the city stays current with upgrades and support. After that time systems should be reevaluated and replaced only as issues that prevent ongoing development arise, such as

- Changes to city functional requirements
- New technologies replace existing ones
- An integrated municipal financial system is developed capable of performing at the level of best-of-breed solutions
- Microsoft reduces its focus on municipalities
- An application is left unsupported due to a corporate merger or bankruptcy

Conclusion

This supplement to Belmont's Technology Master Plan provides a high-level process for finishing the software selection work and the initial implementation planning steps. Once these steps are complete more detailed implementation planning can begin with the selected implementation partner. A key element of this plan is to create a vision of what is designed to be accomplished and then share it with application users so the vision can be implemented and maintained. Cooperative work with users and then buy in and support of implementation will be a key factor in the success of this project.

Belmont's prime objective is to allow for a virtual city hall. The reason for rejecting other municipal-focused applications is that those systems could not fulfill Belmont's vision of sharing appropriate information with its constituents. A key factor for the success of this project is to achieve that vision, keeping in mind that full achievement may not come until all phases are complete. The principal challenge of Belmont's chosen best-of-breed approach to an enterprise system will be to maintain healthy integrations among the various applications, to be sure, this project's success or failure hinges on Belmont's ability to identify, implement and maintain a complete integration system among its various best-of-breed applications.

A corollary objective of this project is to select software applications that have modern, flexible code that continues to evolve with Belmont's "E-Vision." As other needs and opportunities arise this technology should allow Belmont to develop its strategy to take advantage of or cater to new opportunities to provide electronic service to its constituents. As technology evolves this supplement to the Technology Master Plan will evolve along with it.

City of Belmont
Technology Master Plan
FY 2009 - FY 2013

Project	Phase	Description	Fiscal 2009	Fiscal 2010	Fiscal 2011	Fiscal 2012	Fiscal 2013	Total
Software								
Phase I	Implementation	Software	\$ 143,300.00					\$ 143,300.00
		Discount	-29,500.00					-
		Tax	9,388.00					9,388.00
								-
		Hansen Software	176,011.00					176,011.00
		Discount	-12,320.07					(12,320.07)
		Tax	13,503.68					13,503.68
		Software Subtotal	329,882.61	0.00	0.00	0.00	0.00	329,882.61
Image Management		Questys/New Product					130,000.00	130,000.00
		Subtotal	329,882.61	0.00	0.00	0.00	130,000.00	459,882.61
Services								
Phase I	Implementation	Dynamics GP	142,280.00					142,280.00
		HR and Payroll	65,520.00					65,520.00
		Hansen Assets	173,125.00					173,125.00
		Project Management	86,400.00					86,400.00
		Contingency Consulting Services	15,000.00					15,000.00
Phase II	System Integration	Hansen Business Licensing	136,125.00					136,125.00
		Dynamics GP to Hansen Interface	44,670.00	44,670.00				89,340.00
		TM1 and TRAKiT to GP Interfaces	17,720.00					17,720.00
		Project Management	37,000.00	6,920.00				43,920.00
		Contingency Consulting Services		15,000.00				15,000.00
Phase III		Advanced HR and Self-service			21,600.00			21,600.00
		Dynamic Portal			63,750.00			63,750.00
		Project Management			17,200.00			17,200.00
		Contingency Consulting Services			15,000.00			15,000.00
Phase IV		eVision				108,000.00		108,000.00

			Subtotal	717,840.00	66,590.00	117,550.00	108,000.00	0.00	1,009,980.00
Hardware									
Phase I	Implementation	Servers		50,000.00					
			Subtotal	50,000.00	0.00	0.00	0.00	0.00	50,000.00
Maintenance									
Microsoft Software Assurance		Microsoft Maintenance & Support		25,794.00	22,928.00	22,928.00	22,928.00	22,928.00	22,928.00
Hansen Software Assurance		Hansen Maintenance & Support		35,220.00	35,200.20	35,200.20	35,200.20	35,200.20	35,200.20
			Subtotal	61,014.00	58,128.20	58,128.20	58,128.20	58,128.20	293,526.80
			Total	\$ 1,158,737	\$ 124,718	\$ 175,678	\$ 166,128	\$ 188,128	\$ 1,813,389